



## CONSTRUCTION PERMIT APPLICATION REQUIREMENTS FOR AN ON-SITE WASTEWATER TREATMENT SYSTEM

- Upon submittal of an On-site Wastewater Treatment System Construction Permit Application, the following is required:
  - Type and Components of the System
  - Size of Septic Tank and Absorption System
  - Depth of each trench (or depth of bed)
  - Distance to Pertinent Areas (i.e. Setbacks)
  - Site Plan – SEE EXAMPLE FOR REQUIREMENTS
  - Floor Plan of Dwelling, including all finished and unfinished areas
  - Field Evaluation
  - Soil Profile Log
  - Percolation Test Information
  - Source and Location of Domestic Water Supply
  - Replacement Area for Absorption System (if applicable)
  - Printed Name and Signature of Certified Installer
  
- Please be advised that no construction can begin until the OSWTS Construction Permit Application has been approved by Pennington County. A copy of the approved permit may be mailed/emailed to the certified installer following approval. If construction begins before the OSWTS Construction Permit is approved, a penalty fee may be assessed and must be paid before the final inspection is scheduled.

### INSPECTION OF AN ON-SITE WASTEWATER TREATMENT SYSTEM

- The Certified Installer *must set-up an inspection time* with the Onsite Wastewater Specialist during normal duty day **AT A MINIMUM OF 24 HOURS PRIOR** to the needed inspection time.
  
- The Certified Installer shall provide an as-built diagram *at the time of inspection* with the following information:

#### **Requirements for As-Built Drawings**

The As-Built Drawing will be a layout drawing of the on-site wastewater treatment system located on the property showing all property lines, structures, well, etc. The As-Built Drawing, *at a minimum*, shall include **ALL** of the following:

- Location of Septic Tank (or Holding Tank, if applicable) and Absorption System
- Measured distances pertaining to all required setbacks (i.e. wells within 150 feet, property lines, distances to all structures on the property, high water lines, drainages, etc.) – for both the Septic or Holding Tank and Absorption System
- North Arrow
- All streams, creeks, bodies of water and drainage areas.
- Any easements on the property
- Length and width of each trench (or length and width of bed or mound)
- Depth of each trench (or depth of bed)
- Location of any Distribution or Drop Boxes
- Absorption System Reserve Area
- Signature and Date of Certified Installer

## **General Subdivisions Requiring Additional Septic Requirements For Submittal**

**Note:** This is a general guideline of subdivisions. There may be other subdivisions and/or individual properties that will also require additional septic information for submitting an application. Applicants should always check the plat of the property for any special notes prior to submitting any applications. If the property is located within a Planned Unit Development, the conditions of the Planned Unit Development should be checked for any special requirements.

### **Aspen Estates:**

1. Percolation test for drainfield.
2. Septic systems must be signed and stamped by a Professional Engineer – Approved by both Rapid City and Pennington County.
3. Complete report of soils performed by the Engineer.

### **Canyon Springs:**

1. Home can only be four and one-half (4.5) bedrooms max (if larger than 4.5 bedrooms, property owner is responsible for the increase to the OSWTS).
2. System consists of Advanced Treatment Unit (ATU).
3. Applicant must have Service Contract for ATU.
4. Must verify community drainfield is in.

### **Holy Cow Subdivision #2:**

1. Two (2) suitable on-site wastewater systems must be identified, with accompanying percolation tests and soil profiles.

### **Kieffer Ranch Estates:**

1. Prior to issuance of a Building Permit, a reserve drainfield shall be identified.

### **Merchen Estates:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).

### **Ranch at Black Gap:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).
3. Engineered designed septic systems: Percolation testing, soil information, and septic design must be stamped and signed by a Professional Engineer.

### **Sheridan Lake Highlands:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).

### **Silver Spur:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).

### **Spring Creek Acres:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).
3. Engineered designed septic systems.

### **Sunrise Ranch Estates:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).

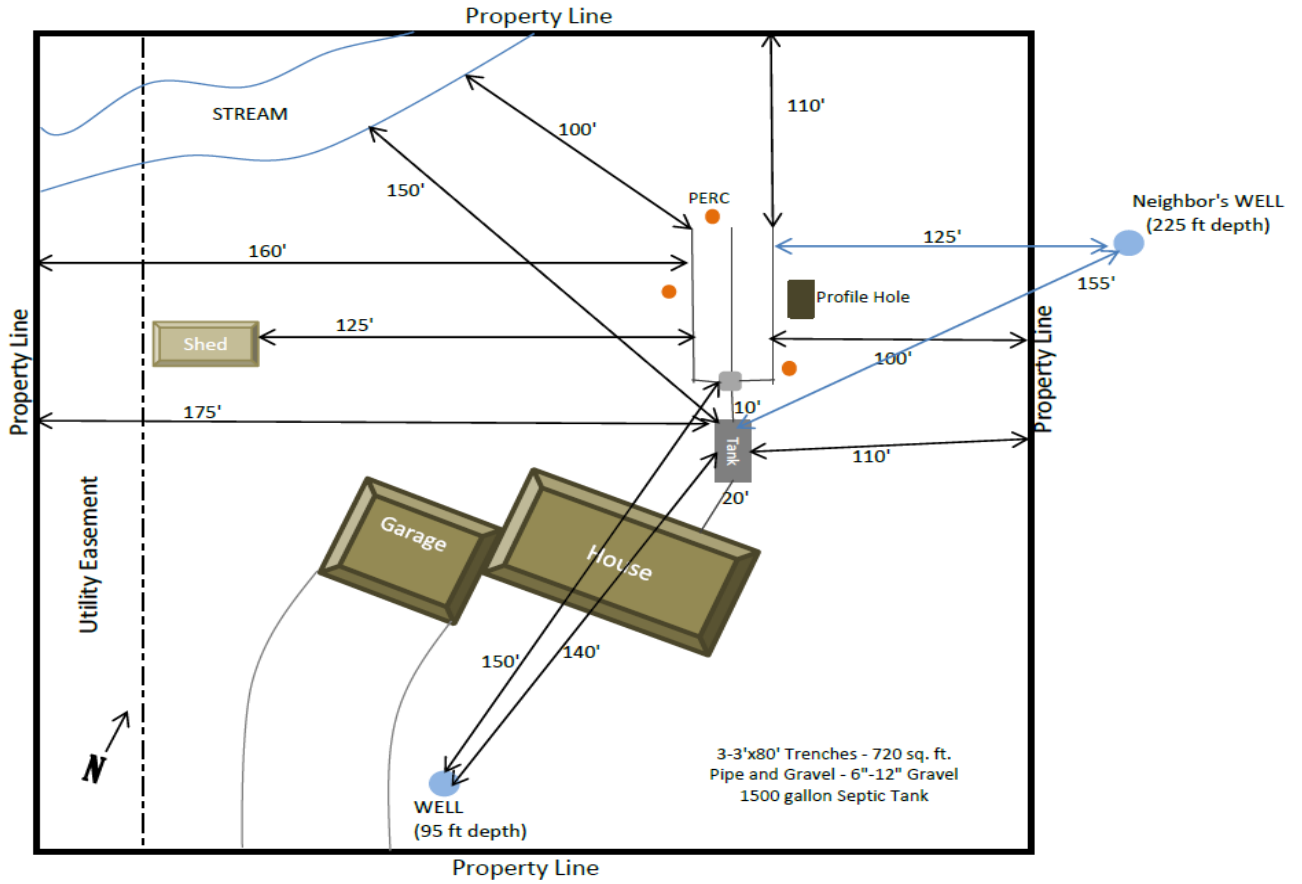
### **Sunset Ranch:**

1. Percolation test for drainfield.
2. Percolation test for reserve drainfield (reserve area must be shown on the site plan).
3. Engineered designed septic systems.

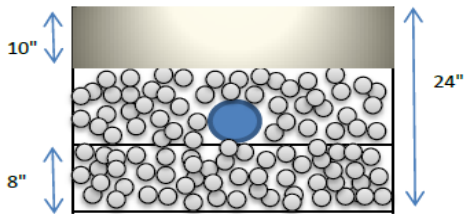
### **Agape Land Subdivision:**

1. Percolation test and profile hole for reserve drainfield (reserve area must be shown on the site plan).

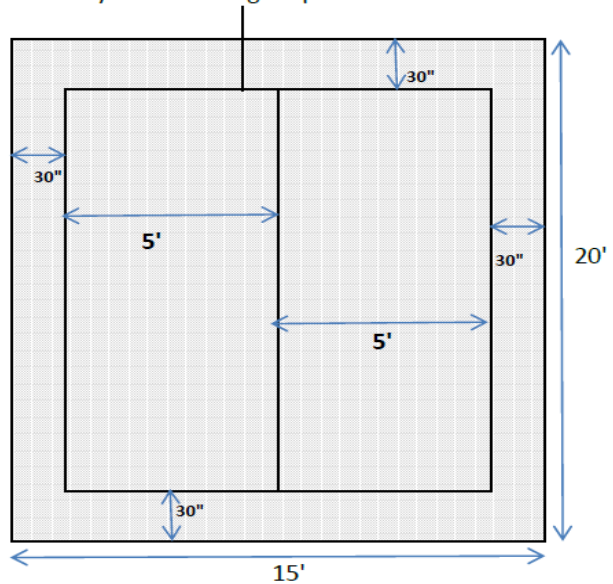
# SITE PLAN EXAMPLE:



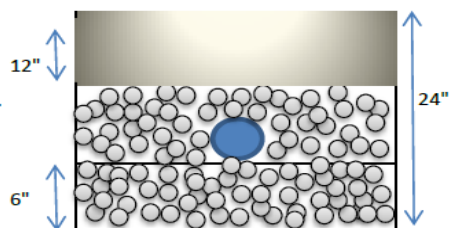
Trench System Cross Section:



Bed System Drawing Requirements:



15' x 20' = 300 sq. ft.  
 6" Gravel Beneath





PLANNING DEPARTMENT  
 130 KANSAS CITY STREET, SUITE 200  
 RAPID CITY, SD 57701  
 605-394-2186 • FAX 605-394-6016  
 www.pennco.org/wastewater

Permit # \_\_\_\_\_

ID # \_\_\_\_\_

## ON-SITE WASTEWATER SYSTEM (OSWTS) CONSTRUCTION PERMIT APPLICATION

*To avoid delays in the application process, all items for the application request must be complete at the time of submittal. The contractor and/or landowner is responsible for verifying that all easement conditions and/or required setbacks are met. A site plan of dwelling must be submitted with this application that must reflect the location and design of the On-Site Wastewater Treatment System with a floorplan of the dwelling(s) to be served by the on-site wastewater treatment system and the total number of bedrooms to be served. The site plan must also show the location of property lines, structures, percolation holes, and the profile hole. No portion of the system may be buried until it has been inspected.*

Landowner \_\_\_\_\_ Phone ( ) \_\_\_\_\_

Address \_\_\_\_\_

Address of Property \_\_\_\_\_

Legal Description \_\_\_\_\_ Section \_\_\_\_\_ Twn \_\_\_\_\_ Range \_\_\_\_\_

Parcel Size \_\_\_\_\_ acres

*Approval of this application is based on the proposed system's compliance with the requirements set out in Pennington County Ordinance §204-J. There may be additional requirements applicable to the subject property, including but not limited to, restrictive covenants. It is not the responsibility of Pennington County to verify and ensure compliance with any such additional requirements.*

Landowner \_\_\_\_\_  
 \_\_\_\_\_ Print Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Certified Installer \_\_\_\_\_ Phone ( ) \_\_\_\_\_  
 Address \_\_\_\_\_

*As a condition of receiving the permit(s), I hereby agree to perform all required work within the allowed time frame and in accordance with the applicable codes and ordinances in Pennington County and the State of South Dakota. I further acknowledge and authorize the Pennington County Planning Department staff and designees to enter onto and inspect the property described above for the purpose of confirming compliance with the conditions of any and all permit(s) issued. This authorization shall remain in effect and continue throughout the time frame allowed to complete the work including any granted extensions, and shall apply to the subject property regardless of ownership during said time frame. I further agree to perform work as approved by the Planning Department as specified in this Permit application.*

Certified Installer \_\_\_\_\_  
 \_\_\_\_\_ Print Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**System Information**     Residential     Commercial\*

Type of System	Components	Depth of clean rock under perforated pipe
<input type="checkbox"/> Trench System	<input type="checkbox"/> 4" Perforated Pipe	<input type="checkbox"/> None
<input type="checkbox"/> Bed System	<input type="checkbox"/> Infiltrator System (20% reduction)	<input type="checkbox"/> 6 inches to 11 inches
<input type="checkbox"/> Mound System*	<input type="checkbox"/> Gravelless Pipe ( ___8" ___10")	<input type="checkbox"/> 12 inches to 17 inches (20% reduction)
<input type="checkbox"/> Alternative System*    Type: _____		<input type="checkbox"/> 18 inches to 24 inches (34% reduction)
<input type="checkbox"/> Experimental system*    Type: _____		Percolation Rate (min./inch) _____

Septic Tank Size (gal) 1500    2050    2800    Existing/Other \_\_\_\_\_    Required Drainfield Size (sq. feet) \_\_\_\_\_

Required DENR approval information attached?  (Yes)    Required Drainfield Size w/Reduction (sq. feet) \_\_\_\_\_

\* Commercial, Mound, Alternative, and Experimental Systems all require DENR Approval PRIOR to OSWTS Construction Permit Submittal.

### RESIDENTIAL - Dwelling/Structure Information

# of Bedrooms \_\_\_\_\_    Finished Square Footage of Dwelling(s) \_\_\_\_\_    Unfinished Square Footage in Dwelling \_\_\_\_\_

Garbage Disposal:  Y     N    Water Source:  Public/Community     Cistern     Well (Depth: \_\_\_\_\_ feet)

**Additional Drainfield Sizing for Unfinished Square Footage:**

144-1000 sq. ft. requires one (1) additional bedroom    1001-2000 sq. ft. requires two (2) additional bedrooms  
 2001+ sq. ft. requires three (3) additional bedrooms.

Located in a Floodplain or Floodway (SFHA)?  Y  N FIRM Panel # \_\_\_\_\_ Effective Date: \_\_\_\_\_

**COMMERCIAL**

Type of Commercial Use \_\_\_\_\_ Required Gallons/Day(gpd) \_\_\_\_\_

Water Source:  Public/Community  Cistern  Well (Depth: \_\_\_\_\_ feet)

**Setbacks**

	<u>To Septic Tank (feet)</u>	<u>To Drainfield (feet)</u>
Public/Community Well	_____	_____
Private Well/Cistern	_____	_____
Pressurized Water Line	_____	_____
Spring/Water Suction Lines	_____	_____
Watercourse (i.e. streams)	_____	_____
Lake, pond, reservoir	_____	_____
Foundation (any building)	_____	_____
Nearest Property Line	_____	_____
Embankments, dry washes, etc.	_____	_____
Trench/bed/mound	_____	_____

**Ground and Terrain Features ( minimum setback required)**

Wastewater System Components	Feet						
	A	B	C	D	E	F	G
Septic tank, aerobic system, or holding tank	50	75	50	50	25	10	10
Absorption field, mound, evapo-transpiration, seepage pit, or graywater system	100	150	100	100	25	20	10
Sewer lines of tightly jointed tile or equivalent material	50	75	50	50	10	0	0
Sewer lines – materials, construction, testing comply with AWWA standards for water mains	30	30	25	3	10	0	0
Unconventional systems	50	75	50	50	25	0	10

<b>A</b>	Wells > 100 ft. deep
<b>B</b>	Wells < 100 ft. deep, Springs, or water suction lines
<b>C</b>	Cisterns or Reservoirs
<b>D</b>	High-Water line of lakes, streams, or impoundments (meandered or ordinary, whichever is higher)
<b>E</b>	Pressurized water lines
<b>F</b>	Dwelling or occupied building
<b>G</b>	Property line – all sides

**Percolation Test Data**

**Test Hole #1**

Date reading taken \_\_\_\_\_ Starting Time \_\_\_\_\_ Depth \_\_\_\_\_ (inches)

Reading	Start Time	End Time	Minutes/Inch (end time – start time)
1 inch			
2 inches			
3 inches			
4 inches			
5 inches			
6 inches			
7 inches			
8 inches			
9 inches			
10 inches			
11 inches			
12 inches			

Percolation Rate for Test Hole #1 \_\_\_\_\_ min/inch (average of readings one through twelve)

**Test Hole #2**

Date reading taken \_\_\_\_\_ Starting Time \_\_\_\_\_ Depth \_\_\_\_\_ (inches)

Reading	Start Time	End Time	Minutes/Inch (end time – start time)
1 inch			
2 inches			
3 inches			
4 inches			
5 inches			
6 inches			
7 inches			
8 inches			
9 inches			
10 inches			
11 inches			
12 inches			

Percolation Rate for Test Hole #2 \_\_\_\_\_ min/inch (average of readings one through twelve)

**Test Hole #3**

Date reading taken \_\_\_\_\_ Starting Time \_\_\_\_\_ Depth \_\_\_\_\_ (inches)

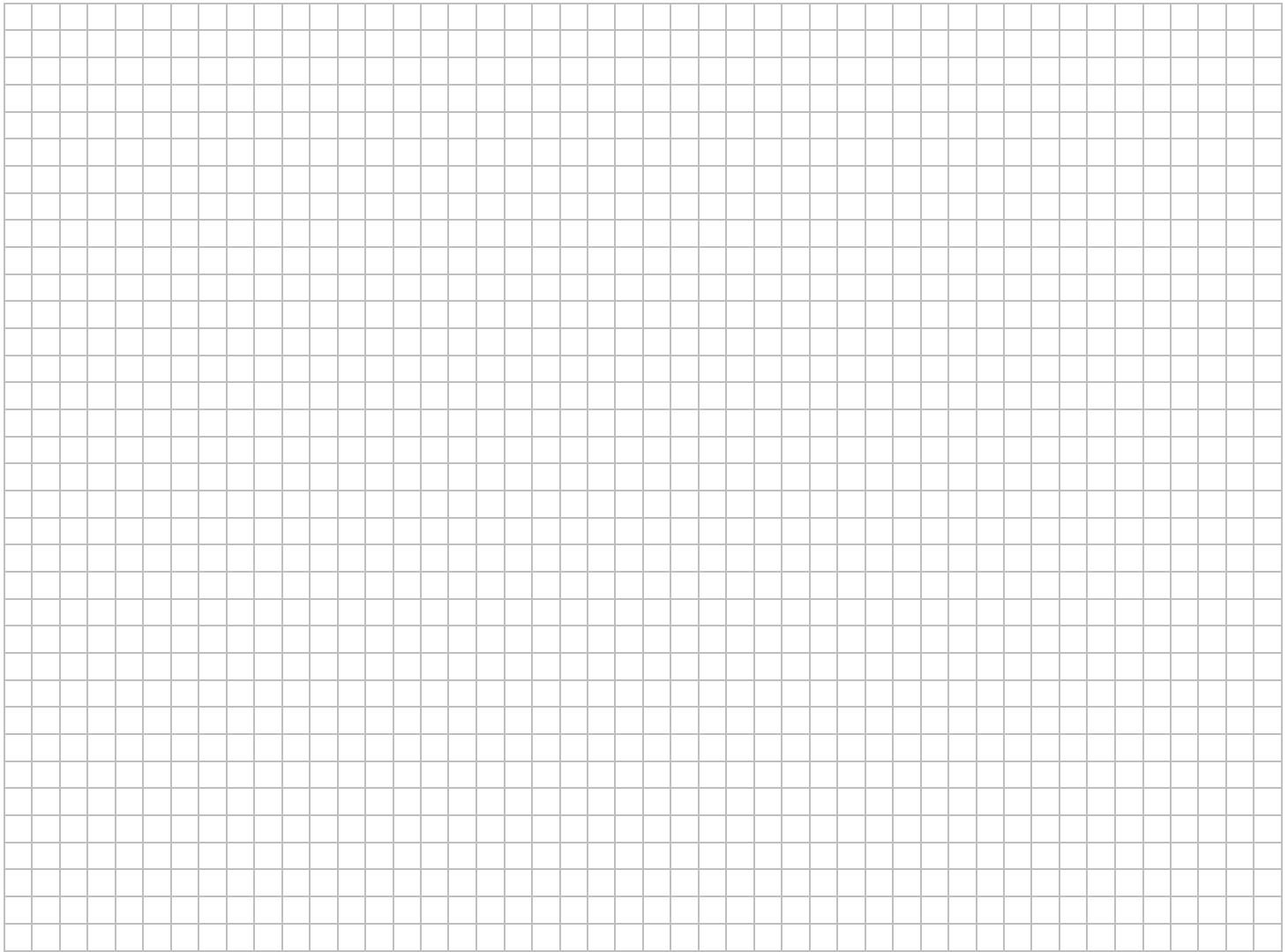
Reading	Start Time	End Time	Minutes/Inch (end time – start time)
1 inch			
2 inches			
3 inches			
4 inches			
5 inches			
6 inches			
7 inches			
8 inches			
9 inches			
10 inches			
11 inches			
12 inches			

Percolation Rate for Test Hole #3 \_\_\_\_\_ min/inch (average of readings one through twelve)

**Average Percolation Rate \_\_\_\_\_ min/inch**

Installer/Person Performing Test \_\_\_\_\_ Print Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**Site Plan**



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The proposed site plan and sewage disposal specifications have been reviewed for the proposed system.  
The system  does  does not meet with the approval of the Planning Department.  
(This is not an approval of an installed system, only the proposed plan).

Issue Date \_\_\_\_\_

Expiration Date \_\_\_\_\_

Onsite Wastewater Specialist \_\_\_\_\_

Expiration Date of Extension (if applicable) \_\_\_\_\_

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*For Internal Use Only*

Checklist:  Site Plan  Blueprint/Floor plan of Dwelling  Percolation Test Information  Profile Hole Information

**\*\*\*\*AS-BUILTS ARE REQUIRED AT THE TIME OF INSPECTION\*\*\*\***